REMARKS

Claims 1, 2, 9-17, 25-33, and 39 were pending in the application. Claims 25-33 and 39 have been canceled, without prejudice, as being directed to a non-elected invention. Claims 1, 2, and 9-17 have also been canceled, without prejudice. New claims 40-58 have been added. Accordingly, claims 40-58 will be currently pending in the instant application upon entry of this Amendment. For the Examiner's convenience, the pending claims are set forth in Appendix A.

Support for the new claims may be found throughout the specification and claims, as originally filed. In particular, support for new claims 44, 45, 46, and 47 may be found in the specification at page 8, lines 5-15 and page 16, lines 22-34. *No new matter has been added.*

Applicants submit herewith a "Version with Markings to Show Changes Made," which indicates the specific amendments made to the claims.

Any amendments to and/or cancellation of the claims is not to be construed as an acquiescence to any of the rejections set forth in the instant Office Action, and was done solely to expedite prosecution of the application. Applicants hereby reserve the right to pursue the subject matter of the claims as originally filed in this or a separate application(s).

Allowable Subject Matter

Applicants gratefully acknowledge the Examiner's indication that "SEQ ID NO:1 is free of prior art. Further the prior art does not teach or suggest preparing such specifically claimed sequence. Hence said sequence is also non-obvious."

Objections to the Claims

The Examiner has objected to claims 1-2 and 16 because "these claims are generic." The Examiner further states that "Applicant is advised to amend the claims to recite only the elected invention and transport systems (claim 2) and fine chemicals (claim 12) which are relevant to the elected invention."

Applicants respectfully traverse the aforementioned objection. However, in the interest of expediting prosecution and in no way conceding to the validity of the Examiner's position, Applicants have cancelled claims 1-2 and 16. New claims 40-58 are directed to SEQ ID NO:1. Accordingly, Applicants respectfully request reconsideration and withdrawal of the foregoing objection to the claims.

Rejection of claims 1-2 and 9-17 Under 35 U.S.C. 112, Second Paragraph

The Examiner has rejected claims 1-2 and 9-17 under 35 U.S.C., 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claims the subject matter which applicant regards as the invention." In particular, the Examiner is of the opinion that

> The phrase "or a portion thereof" in claim 1 (and its dependent claims 2 and 10-17) as well as claim 9 is vague and indefinite because it appears to be redundant. Claim 1 as written required that both corynebacterium glutamicum phosphopyruvate: sugar phosphotransferase system (PTS) protein and "a portion thereof" comprise SEQ ID NO:1. Thus, it is not clear what is the difference between said products.

Applicants respectfully traverse the foregoing rejection. However, in the interest of expediting prosecution and in no way conceding to the validity of the Examiner's position, Applicants have cancelled claims 1-2 and 9-17. New claims 40-58 do not recite the phrase "or a portion thereof." New claims 40-58 are directed to nucleic acid molecules comprising or consisting of SEQ ID NO:1, isolated nucleic acid molecules which encode polypeptides comprising or consisting of the amino acid sequence set forth in SEQ ID NO:2, isolated nucleic acid molecules comprising at least 100 nucleotides of the nucleotide sequence of SEQ ID NO:1, isolated nucleic acid molecules which encode polypeptides comprising at least 100 contiguous amino acid residues of the amino acid sequence of SEQ ID NO:2, and nucleic acid molecules comprising or consisting of a nucleotide sequence which is at least 90% identical to the nucleotide sequence of SEQ ID NO:1. Applicants respectfully submit that new claims 40-58 are clear and definite. Accordingly, Applicants respectfully request reconsideration and withdrawal of the foregoing rejection.

Rejection of Claims 15-16 Under 35 U.S.C. 112, Second Paragraph

The Examiner has rejected claims 15-16 under 35 U.S.C., 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claims the subject matter which applicant regards as the invention." In particular, the Examiner is of the opinion that

> The term "from 1" in claims 15 and its dependent claims 16 is confusing. Usually whether a product is retained inside or excreted from a cell it should be first made in a cell. If applicant means a fine chemical excreted from the cell, he/she is advised to rewrite said claim. Otherwise it is suggested to replace the term "from" with "in" in order to avoid confusion.

Applicants respectfully traverse the foregoing rejection. However, in the interest of expediting prosecution and in no way conceding to the validity of the Examiner's position, Applicants' have cancelled claims 15 and 16. New claim 56 is directed to a host cell wherein the expression of the nucleic acid molecule results in the modulation in production of a fine chemical ***by*** the cell. Applicants respectfully submit that new claims 40-58 are clear and definite. Accordingly, Applicants respectfully request reconsideration and withdrawal of the foregoing rejection.

CONCLUSION

If a telephone conversation with Applicants' Attorney would expedite the prosecution of the above-identified application, the examiner is urged to call the undersigned at (617) 227-7400.

Respectfully submitted,

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Dated: **September 5, 2002**

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Please cancel claims 1, 2, 9-17, 25-33, and 39 and add new claims 40-58.

APPENDIX A

40. **(New)** An isolated nucleic acid molecule comprising the nucleotide sequence set forth in SEQ ID NO:1, or a complement thereof.

41. **(New)** An isolated nucleic acid molecule consisting of the nucleotide sequence set forth in SEQ ID NO:1, or a complement thereof.

42. **(New)** An isolated nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence set forth in SEQ ID NO:2, or a complement thereof.

43. **(New)** An isolated nucleic acid molecule which encodes a polypeptide consisting of the amino acid sequence set forth in SEQ ID NO:2, or a complement thereof.

44. **(New)** An isolated nucleic acid molecule comprising a nucleotide sequence which is at least 90% identical to the nucleotide sequence of SEQ ID NO:1, or a complement thereof, wherein said nucleotide sequence encodes a phosphoenolpyruvate: sugar phosphotransferase system polypeptide which is capable of modulating the transport of a high-energy carbon molecule.

45. **(New)** An isolated nucleic acid molecule consisting of a nucleotide sequence which is at least 90% identical to the nucleotide sequence of SEQ ID NO:1, or a complement thereof, wherein said nucleotide sequence encodes a phosphoenolpyruvate: sugar phosphotransferase system polypeptide which is capable of modulating the transport of a high-energy carbon molecule.

46. **(New)** An isolated nucleic acid molecule comprising a nucleotide sequence which is at least 90% identical to the nucleotide sequence of SEQ ID NO:1, or a complement thereof, wherein said nucleotide sequence encodes a phosphoenolpyruvate: sugar phosphotransferase system polypeptide which is capable of modulating the production of a fine chemical.

47. **(New)** An isolated nucleic acid molecule consisting of a nucleotide sequence which is at least 90% identical to the nucleotide sequence of SEQ ID NO:1, or a complement thereof, wherein said nucleotide sequence encodes a phosphoenolpyruvate: sugar phosphotransferase system protein polypeptide which is capable of modulating the production of a fine chemical.

48. **(New)** An isolated nucleic acid molecule comprising at least 100 nucleotides of the nucleotide sequence of SEQ ID NO:1.

49. **(New)** An isolated nucleic acid molecule which encodes a phosphoenolpyruvate: sugar phosphotransferase system polypeptide comprising at least 100 contiguous amino acid residues of the amino acid sequence of SEQ ID NO:2.

50. **(New)** An isolated nucleic acid molecule comprising the nucleic acid molecule of any one of claims 40-43, and a nucleotide sequence encoding a heterologous polypeptide.

51. **(New)** A vector comprising the nucleic acid molecule of any one of claims 40-43.

52. **(New)** The vector of claim 51, which is an expression vector.

53. **(New)** A host cell transfected with the expression vector of claim 52.

54. **(New)** The host cell of claim 53, wherein said cell is a bacterial cell.

55. **(New)** The host cell of claim 54, wherein said cell belongs to the genus *Corynebacterium* or *Brevibacterium.*

56. **(New)** The host cell of claim 55, wherein the expression of said nucleic acid molecule results in the modulation in production of a fine chemical by said cell.

57. **(New)** The host cell of claim 56, wherein said fine chemical is selected from the group consisting of: organic acids, proteinogenic and nonproteinogenic amino acids, purine and pyrimidine bases, nucleosides, nucleotides, lipids, saturated and unsaturated fatty acids, diols, carbohydrates, aromatic compounds, vitamins, cofactors, polyketides, and enzymes.

58. **(New)** The isolated nucleic acid molecule of any one of claims 42, 43, 44, or 45, wherein said polypeptide is capable of modulating the transport of sucrose.